WHAT IS CLAIMED IS:

1. A torque sensor having a torsion bar rotatably provided inside a cylindrical body; a pair of resolvers different in the number of poles for detecting the torsional angle of said torsion bar in the form of electrical angles thereof; and means for measuring a load torque corresponding to the torsional angle of said torsion bar, based on the difference between the detected electrical angles, wherein:

a stop mechanism is provided for defining the maximum torsional angle of said torsion bar; and

where the numbers of poles of said resolvers are represented by symbols "n" and "m" and the torsional angle is represented by symbol "θ", then said stop mechanism is constructed to satisfy the following expression.

$$\theta < 180 \cdot |1/n - 1/m|$$

2. An electric steering device wherein the torque sensor as set forth in Claim 1 is connected to a shaft which is rotated by the manipulation of a steering handle.

3. A torque sensor having a torsion bar rotatably provided inside a cylindrical body; a pair of resolvers different in the number of poles for detecting the torsional angle of said torsion bar in the form of electrical angles thereof; and means for measuring a load torque corresponding to the torsional angle of said torsion bar, based on the difference between the detected electrical angles, said torque sensor comprising:

a first elongate sleeve fit on an axial mid portion of said torsion bar with a play and secured to one end portion of said torsion bar;

a second elongate sleeve fit on the outer surface of said first elongate sleeve with a play and secured to the other end portion of said torsion bar;

stop portions formed respectively on portions of said first and second elongate sleeves which overlap with each other with said play, and engageable with each other when said torsion bar is twisted a predetermined angle; and

a rotary sleeve given to one of said resolvers and tightly fit on the external

surface of said stop portion of said second elongate sleeve for reinforcing the mechanical strength of said second elongate sleeve.

4. The torque sensor as set forth in Claim 3, wherein said rotary sleeve is press-fit on the external surface of said second elongate sleeve and wherein an interference for tight fit in the press-fitting is chosen in the range of 0 to 50 micrometers.

5. An electric steering device wherein the torque sensor as set forth in Claim 3 is connected to a shaft which is rotated by the manipulation of a steering handle.